pair comprises an aptamer or another synthetic binder complexed to fluorescent moieties or fluorescent analogues, fragments or derivatives of said analyte, or the said binding pair being a peptide or peptidic synthetic binder complexed with fluorescent moieties wherein this mixing provides an analyte-binding molecule-fluorescent moiety complex of changed size, or the said binding pair comprises an antibody or an immunoactive antibody fraction complexed to fluorescent analogues of or fluorescent fragments of, or fluorescent derivatives of said analyte or analytes wherein this mixing provides a competitive reaction with resulting changed fluorescence and;

b) said mixing resulting in a mixture which is being irradiated with polarized light which permits the exitation of said fluorescent molecules, and

c) measuring the polarization of the emitted light, and

d) calculating the concentration or concentrations of said analyte or analytes.

29. (New) A method according to claim 28,

characterized in that the test sample or the aliquot of a test sample is whole blood or anti-coagulated whole blood.

30. (New) A method according to claim 28,

characterized by using a reagent for each analyte comprising immunocomplexes between

a) an antibody or an immunoactive fragment of an antibody with specific affinity for said analyte or analytes, and

b) fluorescent analogues or fluorescent fragments of or fluorescent derivatives of said analyte or analytes.

31. (New) A method according to claim 28,

characterized by using a reagent for each analyte comprising complexes between

a) an aptamer or another synthetic binder with a specific affinity for said analyte, and

b) fluorescent analogues or fluorescent fragments of or fluorescent derivatives of said analyte or analytes.

32. (New) A method according to claim 28,

characterized by using a reagent comprising binding molecules with specific affinity for one or more of the said analytes and with fluorescent moieties with absorption maximum between 600 nm and 1000 nm, preferably above 620 nm, covalently linked to said binding molecules, and said binding molecules being either a peptide or being synthetic binders, optionally being identified by combinatory chemistry techniques or phage display or nucleic acid selection technology.

33. (New) A method according to claim 32,

characterized by the use of a reagent comprising peptides or derivatives of peptides containing amino acid sequence Ala-Arg-Asn-Arg-Asn or Ala-Arg-Asn-Gly-Asn for quantitation of C-reactive protein.

34. (New) A method according to claim 28,

characterized by using a reagent comprising fluorescent binding molecules with specific affinity for one analyte, or comprising fluorescent analogues of, or fluorescent fragments of, or fluorescent derivatives of one analyte only.

35. (New) A method according to claim 28,

characterized by the use of a reagent comprising different fluorescent moieties covalently bound to different binding molecules with different specific affinities.

36. (New) A method according to claim 28,

characterized by the use of a reagent comprising one or more peptides or derivatives of peptides with specific binding affinity for an analyte, said binding peptides having a fluorescent residue covalently linked and being constituted by less than 30 amino acids.

37. (New) A method according to claim 36,

characterized in that binding peptide is constituted by less than 20 amino acids.

38. (New) A method according to claim 37,

characterized in that binding peptide is constituted by less than 15 amino acids.

39. (New) A method according to claim 28,

characterized by the use of a reagent with fluorescent residues with maximum coefficient of absorption at a wavelength above 640 nm.

40. (New) A method according to claim 28,

characterized by the use of a reagent comprising cell lysing substances or anti-coagulants or detergents.

41. (New) A method according to claim 28,

characterized by the use of a reagent comprising one or more fluorescent moieties selected from the group consisting of fluoresceine, Texas Red, Cy5, other Cy Dye FluorLink substances, other Cyanin derivatives, Rhodamin, Methyl Rhodamin, Biodypi 630/650-X/MeOH, Biodypi 650/655-X/MeOH, Biodypi FL/MeOH, Biodypi R6G/MeOH, Biodypi TMR-X/MeOH, Biodypi TR-X/MeOH or other substances from the Biodypi group of substances, Alexa Fluor Dyes of different wavelengths, Ruthenium ligand complexes, lanthanoid elements such as Europium, Samarium or Terbium complex bound to a chelating ligand like DTPA, EDTA or N1.

B1

42. (New) A method according to claim 28, characterised by that the polarisation of the emitted light is measured as a function of time, either as a continuous kinetic reading or a reading

of the change in the polarisation of the emitted light between two or more time points, or as a measurement of the polarisation of the emitted light after a defined point of time.

43. (New) A method according to claim 28, characterised by that sample material or aliquot of the sample material is constituted by a biological material, or a dilution or an extract or being dissolved from or being filtrated from the said biological material.

44. (New) A method according to claim 28, characterised by that sample material or aliquot of the sample material is constituted by blood, or blood serum, or blood plasma, or blood cells, or lysate from blood or blood cells, or urine, or cerebrospinal fluid, or tear liquid, or sputum, or semen, or plasma, or semen or material aspirated from the gastro-intestinal tract or feces, or extract or filtrate from the suspension of feces, or plant material or extracts thereof, or dissolved plant material or filtrate thereof.

45. (New) A method according to claim 28, characterised by the use of standards or calibrators comprising known concentrations of the analyte or the analytes, and furthermore wherein the concentration or concentrations of said analyte or analytes in unknown samples is calculated by interpolation of the values obtained from the unknown samples on the standard curve obtained from said known standards or calibrators.

46. (New) A method according to claim 28, characterised by the use of a standard curve stored in an artificial memory, optionally connected to the fluorescent polarisation instrument in use.

47. (New) A method according to claim 28, characterised by the use of temperature correction algorithms, either generated empirically or theoretically, to compensate for differences in fluorescence polarisation caused by differences in temperature at different time of

B1

measurements of standards and unknown samples, or between standards, or between unknown samples.

48. (New) A method according to claims 28, characterised by being provided in concentrated or dry form, to be diluted or reconstituted before use, the said reagent being provided divided between different compartments for combination into one reagent prior to use.

49. (New) A method according to claim 28, characterised in that said reagent comprises at least one type of binding molecule with specific affinity for one or more of the said analytes, and said reagent furthermore comprises fluorescent moieties covalently linked to the said binding molecules or fluorescent analogues of or fluorescent fragments of or fluorescent derivatives of said analyte or analytes.

50. (New) A reagent according to claim 49, characterised in that the reagent comprises complexes between a) an antibody or an immunoactive fragment of an antibody or an aptamer or a synthetic binder with specific affinity for at least one analyte and b) fluorescent analogues or fluorescent fragments of or fluorescent derivatives of said analyte or analytes.

51. (New) A reagent according to claim 49, characterised in comprising binding molecules with specific affinity for one or more of the said analytes and optionally with fluorescent moieties with absorption maximum between 600 nm and 1000 nm, preferably exceeding 620 nm, more preferably exceeding 640 nm, covalently linked to the said binding molecules, and said binding molecules being either of peptide or aptamer composition or being synthetic binders, optionally being identified by combinatory chemistry techniques or phage display or nucleic acid selection technology.

52. (New) A reagent according to claim 49, characterised in being an assay reagent comprising peptide binders or binders of derivatives of peptides, including fluorescent

derivatives of said binders, containing the amino acid sequence Ala-Arg-Asn-Arg-Asn and/or Ala-Arg-Asn-Gly-Asn.

53. (New) Use of the method according to claim 28 to determine concentrations of clinically related substances in samples of biological material from living organisms in need thereof.

54. (New) Kit for determination of concentration of one or more analytes in a test sample or an aliquot of a test sample of complex biological fluid, characterized in comprising one or more containers, wherein the container(s) or compartment of the container(s) contains one single reagent, preferably in the fluidal state and according to claim 48, and wherein the reagent comprises one or more fluorescense-labelled specific binding molecules towards the analyte(s) to be measured, or a fluorescence-labelled analogue or a fluorescent fragment or a fluorescent derivative of said analyte(s), as well as device for obtaining the exact volume(s) of the complex biological fluid to be tested and that is needed in order to perform the method adequately.

55. (New) Kit according to claim 54, characterized in that the reagent which is contained in a container or a compartment of a container, is formed to a ready-for-use reagent by mixing the content from different containers prior to or immediately prior to or in connection with the execution of the analysis.

B1 Cont'd